

# HISTORY OF MISSOURI FORESTS IN THE ERA OF EXPLOITATION AND CONSERVATION

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**Abstract**—The era of timber exploitation and early conservation in the Missouri Ozarks occurred roughly from 1880 to 1950, beginning when large timber companies moved into the region to harvest the pine and oak of the valleys and ridgelines. Pine was largely depleted by 1910, but oak harvest continued. Resident Ozarkers, who came largely from a tradition of subsistence hunting, gathering, and basic farming, frequently resisted the efforts of both timber companies, such as the Missouri Lumber and Mining Company, and governmental agencies to bring modernization and industrial productivity to the region. As a result, governmental conservation developed later in Missouri than in neighboring states. The federal government created its first national forests in Missouri in 1933, and the state did not establish a permanent agency devoted to forestry until 1937. The struggle to control access to the region's forest resources and culture remained a prominent issue throughout the era. The legacy remains today in forests with an abnormally high percentage of cull and continued resistance of Ozarkers to governmental regulation.

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## INTRODUCTION

The forests and the people of the Missouri Ozarks experienced waves of change from the 1880s to the 1940s. During this era large-scale timber operations moved into the region and began to harvest timber. After the collapse of the timber industry local Ozarkers worked to re-establish an independent society free of outside interference. After a decade of failed efforts the federal and state governments finally succeeded in establishing a presence in the Missouri Ozarks during the 1930s. This entire succession of events occurred in an atmosphere of tension between Ozarkers and outsiders over the control of natural resources and the character of Ozark society.

## PRE-TIMBER ERA

Ozarkers' heritage shaped the society that existed before the arrival of the timber industry. Many residents of the region traced their lineage through the upland South to Scotland. Scots-Irish who migrated to the United States in the 18<sup>th</sup> century brought a pragmatic approach to life and a distrust of authority. As residents of the frontiers of Virginia, North Carolina, Kentucky, Tennessee, and, later, the Missouri Ozarks, they honed their love of independence and their ties to the wooded hills on which they depended. (Stevens 1991).

Geographically and culturally isolated, Ozarkers depended on their ability to extract a living from the natural world, roaming the woods in search of game, fruits, nuts, berries, and herbs to supplement their small farms. They used the forest as a commons where livestock roamed free and firewood and timber belonged to whoever cut or collected it. They burned the forest each spring to improve forage for their livestock and reduce ticks and snakes. The issue of woodburning would be at the center of conflicts between Ozarkers and outsiders from the 1880s to the 1940s and beyond.

## THE TIMBER BOOM

The Missouri Ozarks experienced a timber boom from approximately 1880 to the 1910s, as railroads penetrated the region. During these years large firms such as the Missouri Lumber and Mining Company, the Ozark Land and Lumber Company, and the Cordz-Fisher Lumber Company bought land and built mills throughout the region. They sought mostly the shortleaf pine on some 6.6 million acres of the eastern Ozarks but also tapped the white and red oak with which it was mixed.

The control of resources emerged as a primary issue as the timber industry began to dominate the region. The Missouri Lumber and Mining Company (MLM) obtained 30,000 acres of pineland in Carter County years before it moved a single employee or piece of machinery there. As timber companies bought and cut land throughout the Ozarks, traditional residents of the region lost some of their access to the resources they had depended on for survival.

The firms sought not only to prevent trespass but to establish a productive, and dependable, labor force. The MLM met this need by creating a company town in Carter County named Grandin (fig. 1), after one of the firm's initial investors; its sawmill at its peak was reputed to be the largest in the nation. Interactions between the MLM and the residents of Grandin and the surrounding hills demonstrate the conflicting visions of society during the years of the timber boom in the Missouri Ozarks. The MLM worked to control the lives of its employees to ensure consistent production while Ozarkers tried to maintain elements of their traditional lifestyle and relationship with the woods. Tensions developed over schedules of work, religion, education, and leisure activities.

The MLM attempted to get as much work out of its employees as possible despite workers' desire to set their own schedules. Ozarkers resisted the MLM's inclusion of

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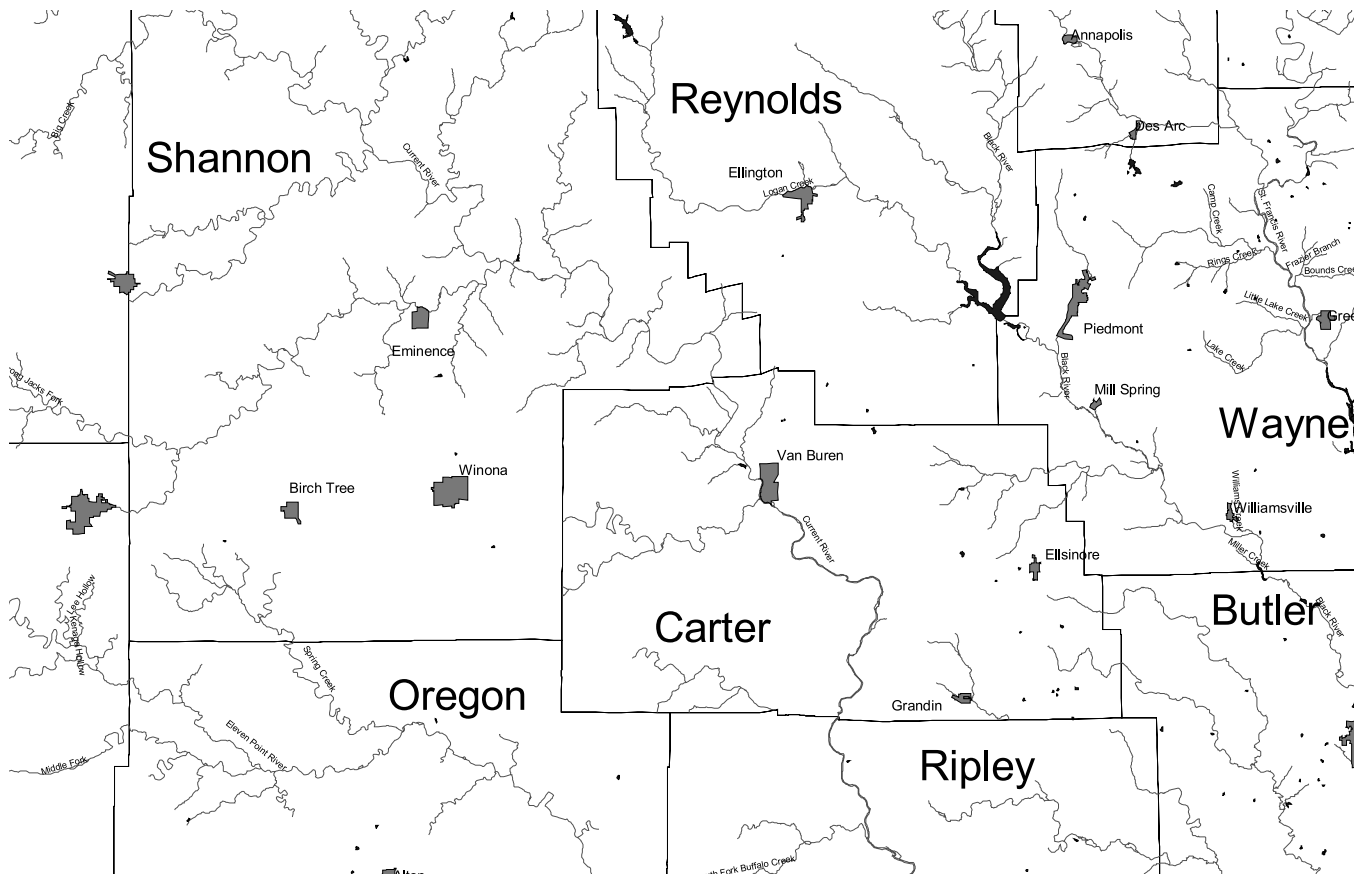


Figure 1—Carter County and surrounding area.

Sunday in the regular workweek as it expanded its operations beyond Carter County. When the firm faced local opposition over Sunday work as it began logging in Reynolds County in 1905, it offered the county's prosecuting attorney \$300 per year if he would discourage people from using legal means to resist. But when MLM expanded into Shannon County in 1907, the prosecuting attorney there sided with the locals. MLM's Ozark manager C.C. Sheppard reported to company president J.B. White that "there is nothing we can do at present, except discontinue this [Sunday] work." [On Reynolds County see J.B. White to W.B. Pettibone (Jan. 12, 1906), folder 57. On Shannon County see C.C. Sheppard to J.B. White (Feb. 12, 1907), folder 364. All letters are in the Missouri Lumber and Mining Papers (hereafter cited MLM Papers) at Western Historical Manuscripts Collection, Ellis Library, Columbia, MO (hereafter cited WHMC)]. Ozarkers and the MLM had different ideas about work. Ozarkers entered the timber boom from a subsistence lifestyle grounded in the cycle of the seasons, while MLM attempted to institute an industrial view of labor based on production quotas and a time clock. Conflicts over this basic element of society reflected the larger tensions of the era.

One of the most effective methods of social control throughout history has been religion. The MLM made every effort to serve as the patron of Grandin's religious institutions throughout the company's tenure in the town. The MLM claimed to

remain open to all doctrines and there is no evidence that the company attempted to influence the sermons of its preachers. While in Grandin the MLM paid the salaries of the preachers at no fewer than three churches—Methodist, Baptist, and Congregationalist. The Congregational Church established a particularly close relationship with the MLM. C.E. Slagle, who ran the company store, occasionally served as a deacon, and the church created an association, the Knights of King Arthur, devoted to teaching young men vocational skills useful in a timber economy as well as the dangers of alcohol and tobacco, which gained the Congregationalists an extra stipend from the MLM. Ozarkers, however, favored the Baptist church, derisively described by White as having "tobacco stained floors and walls" [J.B. White to G. Andrews (Feb. 26, 1906), folder 111; W. Bosard to J.B. White (Feb. 11, 1907), folder 362; J.B. White to C.C. Sheppard (Aug. 1, 1907), folder 530; J.B. White to E.B. Grandin (Sept. 6, 1907), folder 584; all in MLM Papers]. Ozarkers demonstrated their rejection of the urban and industrial values of the MLM by patronizing the church they felt most comfortable in.

Although the MLM never explicitly stated a desire to shape the minds of children in the region, its combination of programs such as the Knights of King Arthur and the maintenance of company schools served to draw the youth of the Ozarks into the control of the company. The MLM built Grandin's school, paid the teachers, and provided

each graduate with a gift. There is some evidence that these practices paid off. When Leonard Hawn's father left the MLM's employ in 1907, Leonard, a graduate of the Grandin school, chose to seek his future with the MLM rather than with his family [C.C. Sheppard to J.B. White (May 30, 1907), folder 438, MLM Papers].

Leisure activities, especially the use of alcohol, represented yet another arena of tension. Ozarkers drank on the job, bootlegged, and opened illicit drinking establishments, while the MLM consistently fired employees drunk at work whether they were laborers, foremen or doctors. One of the best examples of this is the case of Dr. Rhea, a resident of nearby Oregon County, who was employed to assist while the regular MLM physicians took their vacations. After Rhea spent two weeks at a logging camp, the company discovered he had spent a large portion of the time drinking with the locals and fired him immediately [C.C. Sheppard to J.B. White (June 19, 1906), folder 189, MLM Papers]. Ozarkers, regardless of their position in society, returned to their tradition of relaxing in one another's company with their whiskey when they had the opportunity. As a proponent of modernization and efficiency the MLM could not tolerate drunkenness among its employees.

The timber boom came to a close in the Missouri Ozarks around 1910 (fig. 2), when it was beginning to peak in Arkansas, Louisiana and other states in the South and taking off in the Pacific Northwest. By then Missouri's pine was virtually gone, and it has never recovered; even today it amounts to only about 600,000 acres, less than one-tenth its former acreage. The MLM and other large companies moved their operations to other regions with uncut forests, selling off their cutover land to unsuspecting buyers or simply stopping payment of taxes.

The MLM understood the psyche of its workers. When the company decided to close its operations in Grandin, several Ozarkers confronted J.B. White at the company store with concerns about their future. White pacified the locals when he told them he "considered it much better for them to have a small farm and a garden even if they lived in small log houses and raised their living and have their hogs fattening on the mast, that they would be better off than working around a saw mill and paying rent" [J.B. White to A. Johnston (Feb. 5, 1910), folder 755, MLM Papers]. Whether or not the exchange happened exactly the way White claimed, many locals did turn to farming after the big mills left the Ozarks.

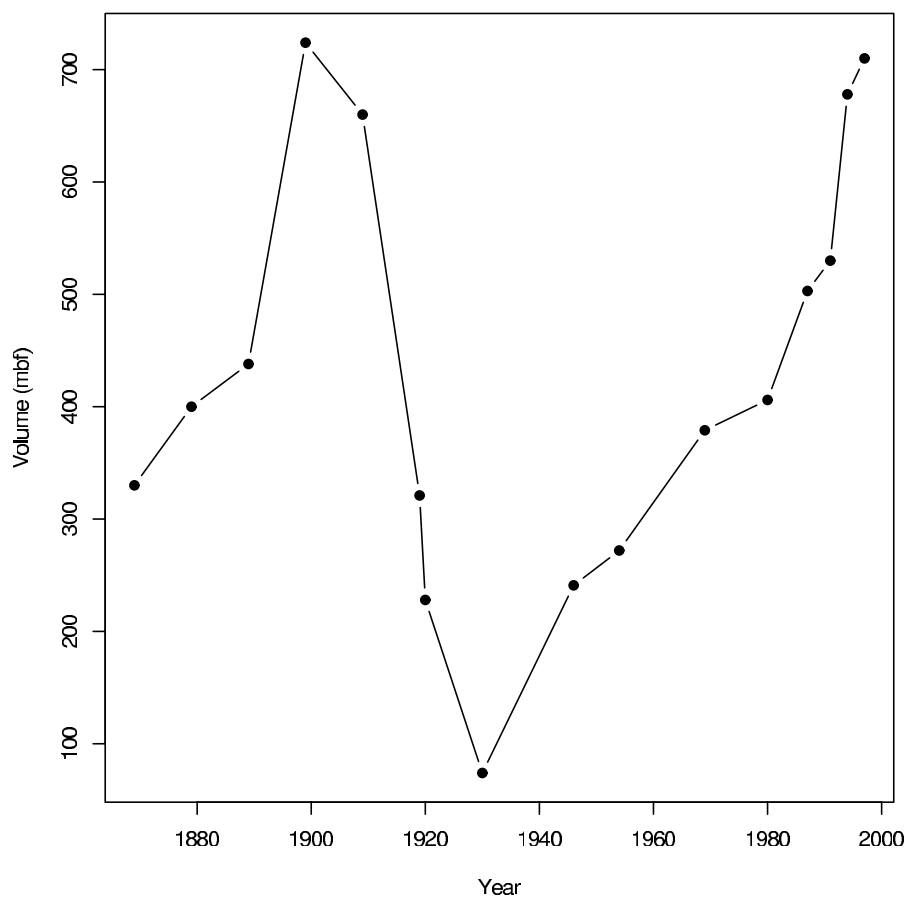


Figure 2—Missouri sawlog production (in million board feet) in selected years, 1860-2000. Figures from 1869 to 1946 are from U.S. Census of Manufactures categories "sawed timber" or "lumber sawed," as reported in Steer (1948). For certain years Steer also includes "estimates" that are somewhat higher, i.e., 1929—260 and 1939—296. Sawlog figures from 1958 to 1997 are from USDA resource bulletins.

## THE TRANSITIONAL ERA

The years from about 1910 to the mid-30s were a transitional era in the Missouri Ozarks. While Ozarkers attempted to return to a life of subsistence agriculture, the timber interests still in the area sought to extend the life of the remaining oak and other hardwoods by initiating an industrial style of conservation. Neither group truly succeeded.

With the departure of much of the timber industry, locals tried to meet their needs with family farms. Between 1900 and 1920 the number of farms increased in both Carter and Shannon counties. Despite this growth, both counties stayed near the bottom of the state in terms of percentage of land in farms, meaning that most farms were small (Stevens 1991). Locals purchased what land they could and tried to cultivate the rugged terrain, supplementing their meager produce by hacking oak ties and cutting wood from high-graded stands for stave bolts, charcoal, and firewood. Much of this cutting was from land they did not own but claimed permission to cut, a practice described as "grandmawing."

As Ozarkers tried to regain their traditional self-sufficiency they also sought to assert their independence from outside forces. They did this in part through opposition to government agencies, which found the Ozarks a less than welcoming region. Although the federal government was active in states bordering Missouri, including Arkansas where the Arkansas (later, Ouachita) and Ozark National Forests were established in 1907 and 1908, it was unable to establish a forestry presence in the Missouri Ozarks during the period. Unlike Arkansas, Missouri had no public domain remaining at the time; but even after passage of the Weeks Act in 1911, which authorized purchase of land for national forests in the eastern states, the Missouri General Assembly, disproportionately representative of rural areas, failed to pass enabling legislation for two forests proposed in 1914.

Nor was the rural-dominated Missouri legislature willing to approve a state forestry agency advocated by several governors, even though more than half the states established such an agency during the Progressive Era. The state passed a game and fish law, including a license and warden system, in 1905, but the Game and Fish Department struggled to establish a presence in the Ozarks, where locals made sport of dodging the regulations and the wardens. In 1917 the legislature authorized five percent of all game and fish license fees to be set aside in a state park fund, a measure in considerable disfavor among both urban sportsmen and Ozarkers, especially after the diversion was increased to 25 percent in 1923 and the state began buying parklands in the Ozarks. The parks would be off limits to hunting, timbering, and livestock.

The state's efforts in forest conservation during the transitional period devolved to the hands of a group of influential timbermen who continued to tie their fortunes to Missouri, where St. Louis was the main crosstie market in the nation and Kansas City still a major distribution point for southern lumber. At a dinner in 1921 sponsored by the Lumbermen's Exchange of St. Louis and the Tie and Timber Division of the St. Louis Chamber of Commerce, they organized a Missouri Forestry Association (MFA) in order to "advance the public understanding of the importance of timber crops"

and insure "a proper area of forests so maintained and cared for as to furnish a supply of timber for future needs" [The organization meeting of the Missouri Forestry Association (Dec. 21, 1921-Jan. 22, 1922), and Missouri Forestry Association: Constitution (Dec. 7, 1921), both in folder 275, Frederick Dunlap Papers, 1891-1937, WHMC.]

The MFA dominated Missouri's efforts to establish control over its forests during the 1920s, advocating fire prevention, tax reform, and reforestation and opposing national forests or regulation at any level, federal or state. Though some urban conservation and recreational interests promoted national forests and other public land at the time, the MFA sought to prevent the U.S. Forest Service from entering the state. They did not favor state forests either, except perhaps as small demonstration areas, though they advocated a state forestry program that could encourage protection of private forests. Missouri was one of only a handful of forested states with no forestry legislation or administration whatever by the 1920s. When the Clarke-McNary Act of 1924 made federal matching funds available to qualified state forestry agencies for fire protection and reforestation, the MFA lobbied for the best they could get in 1925 from a legislature ever attentive to rural voices, a small forestry program under the State Board of Agriculture, provided that they—the timber industrialists in MFA—would pay the salary of the state forester and related expenses [for one demonstration of the MFA's relationship with the Clarke-McNary Act see Minutes of council meeting (Aug. 4, 1925), folder 276, Dunlap Papers].

Despite having achieved some success, the MFA could not change the attitudes of most Ozarkers towards forestry. Both MFA and the new state forester devoted their greatest efforts to the fire problem, but Ozarkers refused to give up the practice of woodburning, an important part of their traditional culture. The new state forester, Frederick Dunlap, and his only assistant, Paul Dunn, who was stationed in the Ozarks to organize local communities to control their own fire, tried valiantly to make inroads. But when funding for their small program dried up entirely in 1931, they gave up in despair and left the state; Dunlap filed a final report concluding that fire control was "impossible" in the Ozarks (Callison 1953, 96) (we have been unable to find the report). The MFA also may have given up on its attempts to control the state's forests by this time, as it seems to have essentially disappeared.

## ERA OF GOVERNMENTAL INVOLVEMENT

As the great depression, which had already begun in the Ozarks in the 1920s in the aftermath of the timber boom, deepened over the entire nation during the 1930s, economic, social, and environmental conditions combined to facilitate the entrance of government into the Missouri Ozarks.

At the urging of the governor, the state legislature in 1929 finally passed an act authorizing national forests in Missouri, but an amendment rendered it moot by limiting acquisition to 2000 acres per county. Then a new National Forest Reserve Association, formed by local businessmen and public officials in the eastern Ozarks, won authorization in 1933 for up to 25,000 acres per county—a limitation subsequently removed—and the U.S. Forest Service quickly established eight purchase units in the Ozarks and

began land acquisition. The *National Plan for American Forestry*, issued in 1933, concluded that private owners were responsible for “practically all the major forest problems” and recommended public ownership of *half* the nation’s forest land; state planners in turn recommended that 8 million acres in Missouri be in public ownership and devoted to intensive forestry (Missouri land use problems and policy. Transmitted to National Resources Board May 18, 1935 by E.A. Mayes, research assistant, 141p. tps., in Missouri State Planning Board, 1933-1943, Missouri State Archives, Jefferson City, MO). In fact only about 1.3 million acres would be purchased in Missouri during President Roosevelt’s New Deal.

Even before the acquisition of substantial national forest lands, however, Missouri took advantage of the New Deal’s Civilian Conservation Corps and other work relief programs to develop its state parks, by 1933 totaling more than 40,000 acres. The state’s emphasis on park development, funded in part by diversions from fishing and hunting license fees, coupled with decimated wildlife populations and the ever-political nature of the game and fish warden system, led Missouri sportsmen to launch an initiative petition campaign in 1935 for a constitutional amendment to create a bipartisan conservation commission with full authority for fish, wildlife, and forestry, but not parks (Flader, in press). Though the measure passed overwhelmingly in 1936, most of the 29 counties in which it failed were forested counties in the Ozarks, where residents were still deeply resistant to outside interference (Callison 1953).

With parks now relegated to a separate agency, the new commission in 1938 hired George White from the U.S. Forest Service to develop a state forestry program. White hired five more professionally trained foresters and assigned them to protection districts in the Ozarks. With lookout towermen and high school boys hired locally to help spot and fight fires and with a mobile motion picture unit, they began the long, slow process of educating Ozarkers about the perils of woodburning. Until they could control fire, reforestation and forest management would hardly pay—though, White believed, if landowners could be induced to plant trees, they would become advocates for fire control (Keefe 1987). By late 1938 White had cooperative fire-fighting agreements with 144 private landowners—likely corporations, as they owned between 500 and 37,000 acres apiece. The size of the holdings suggests that, while the forestry program may have had support, it was not from the common Ozarker. As late as 1946, the forestry division admitted that fire protection remained its primary focus [Missouri Conservation Commission, Press Releases, 1937-1939 and 1946-1947 (bound and held by the State Historical Society of Missouri, Columbia), 1-2].

The Missouri General Assembly in 1946 finally passed its first significant forestry legislation, the State Forestry Act, which established a “forest cropland” program and provided penalties for woods arson; and it finally began appropriating funds (\$150,000) from general revenue for forestry purposes, mostly fire control, which enabled the state to receive more matching funds from the federal government. By 1950 Missouri’s 15.5 million acres of forest included 150,000 acres of state forests and 1.3 million acres of national forests,

although the land had only about one-fifth the stocking of sawtimber that could be expected under good management and open range for livestock still prevailed in much of the Ozarks. About 6 million acres, public and private, were organized in forest protection districts, only about two percent of which burned annually, compared with an estimated one in three acres before fire control (OM 1951-52: 341-43). The state was on its way to a more effective forestry program.

## CONCLUSION—THE LEGACY

The growing success of the U.S. Forest Service and the Forestry Division of the Missouri Conservation Commission marked the beginning of permanent governmental involvement in the Ozarks. Later generations would establish the Ozark National Scenic Riverways (1964), end the practice of open range grazing (1967), begin to recognize the region’s ecological significance, and even appreciate and begin to mimic the ecological role of natural fire.

By the close of the 20<sup>th</sup> century, Missouri’s 14 million acres of forest land, four-fifths of which is in the Ozarks, would remain overwhelmingly (83 percent) in private hands (fig. 3), controlled by more than 300,000 landowners, the vast majority of whom owned fewer than 50 acres. Forest industries would own less than 2 percent (compared with 25 percent in Arkansas and 14 percent in the country as a whole) and public agencies 15 percent, including 1.5 million acres in the Mark Twain National Forest, some 444,000 acres of state forests, and 138,000 acres of state parks. The incidence of wildfire—as opposed to prescribed fire—is down to about 1/10 of 1 percent of Missouri’s forests burned annually, but almost all the fires are human caused, the majority of them still classified as arson—a lingering remnant of the Ozark tradition of woodburning and resistance to outside authority.

More than a century of land abuse by industry and Ozarkers alike, coupled with continued poverty, rugged individualism, and distrust of governmental authority, has left Missouri forests with the highest percentage of cull material (tables 1 and 2)—trees unusable for industrial wood products because of rot, dead material, form, or other defect—of any state in the nation (Shifley 1999). Virtually all of this cull is in hardwoods, much of it in the red oak group that came to dominate the more than 6.6 million acres formerly in shortleaf pine in the wake of heavy exploitation and continued burning, grazing and erosion. This legacy of mistreatment, coupled

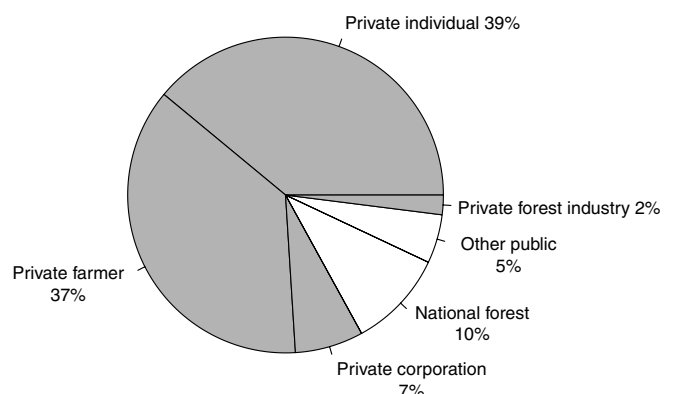


Figure 3—Missouri timber ownership by class.

**Table 1—Total cull material**

Rank	State	Cull	Growing stock	Cull of total
		<i>billion cubic feet</i>		<i>percent</i>
1	Missouri	4.8	9	35
2	Mississippi	2.9	19.8	13
3	Maine	2.8	24.3	10
4	Virginia	2.4	25.9	8
5	Wisconsin	2.2	16.6	12
6	Texas	1.9	12.9	13
7	N. Carolina	1.9	32.7	5
8	Minnesota	1.9	15.1	11
9	Louisiana	1.9	18.9	9
10	Georgia	1.9	30.7	6

Source: Shifley (1999).

**Table 2—Percentage of hardwood cull material**

Rank	State	Hardwood cull	Hardwood growing stock	Cull of total
		<i>- - - billion cubic feet - - -</i>		<i>percent</i>
1	Missouri	4.8	8.1	37
2	Kansas	0.7	1.2	36
3	Oklahoma	0.9	1.6	35
4	Iowa	0.9	1.7	34
5	Nebraska	0.1	0.3	22
6	Arkansas	1.9	12.3	13
7	Tennessee	1.5	13.8	10
8	Illinois	0.5	4.7	10
9	Kentucky	0.6	14.8	4

Source: Shifley (1999).

with drought and the advancing age of many trees, has left the state's forests especially vulnerable to wood-boring insects, fungi, and other manifestations of oak decline.

Yet Missouri still has no forest practices act to guide the treatment of private lands. A broadly representative

Governor's Advisory Committee on Chip Mills that heard testimony for more than a year on the sorry state of Missouri's forests proved unwilling to embrace any sort of regulatory mechanisms for better forest management, largely out of respect for—or fear of—Ozarkers' insistence on private property rights and their resistance to governmental regulation, and the state legislature failed to enact any of the committee's recommended economic incentives (Lewis, in press). The challenge for Missourians to secure better management of their forests remains immense.

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